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ANNUAL REPORT

OF THE

Department of Public Works

OF THE

PROVINCE OF ALBERTA

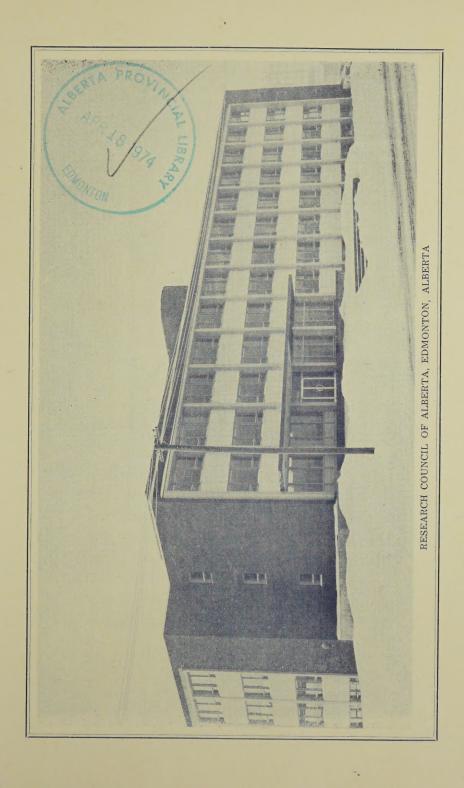
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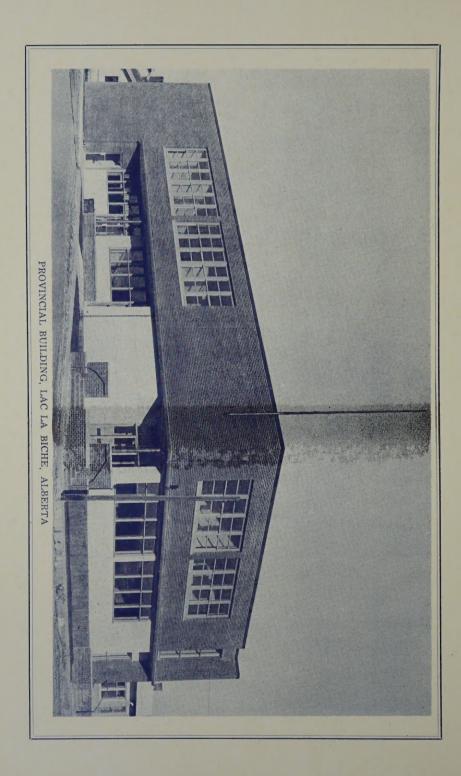
PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON
PRINTED BY A. SHNITKA, QUEEN'S PRINTER FOR ALBERTA
1956

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ANNUAL REPORT

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Department of Public Works

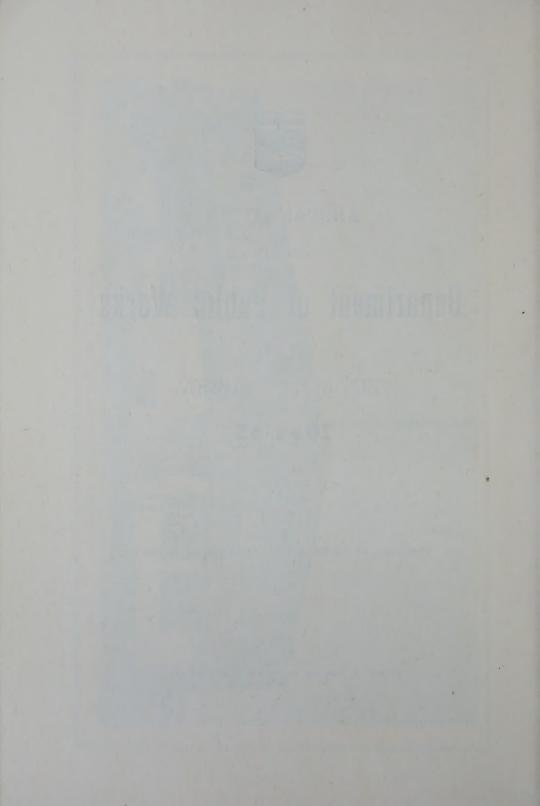
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Edmonton, October 3rd, 1955.

To His Honour,

J. J. BOWLEN,

Lieutenant Governor of the

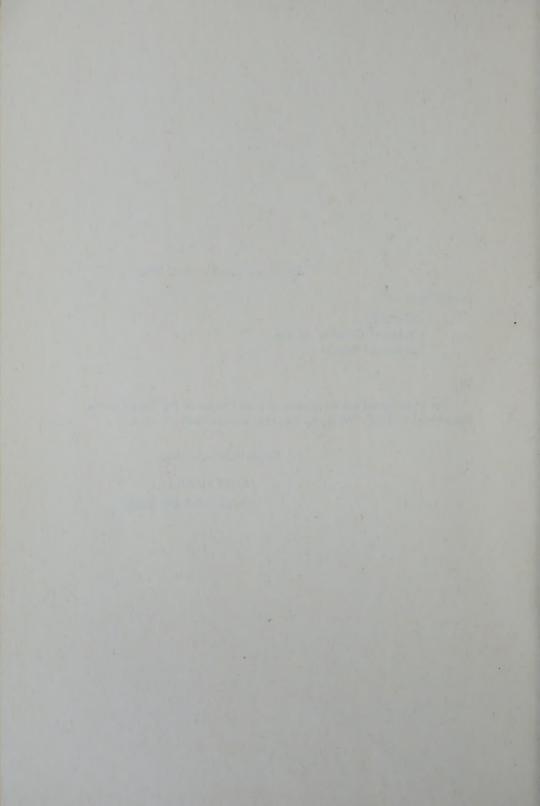
Province of Alberta.

Sir,

The undersigned has the honour to submit herewith the Report of the Department of Public Works for the year ended March 31, 1955.

Respectfully submitted,

JAMES HARTLEY, Minister of Public Works.



REPORT

of the

DEPUTY MINISTER OF PUBLIC WORKS FOR THE FISCAL YEAR ENDED MARCH 31st, 1955.

TO:

Honourable James Hartley, Minister, Department of Public Works.

Sir.

I have the honour to submit herewith the report covering the activities of the Department of Public Works for the fiscal year ended March 31st, 1955.

The Department has just completed another year during which a continued high volume of work was processed.

The Calgary area saw greater activity than preceding years. Construction was commenced on a new building for the Petroleum and Natural Gas Conservation Board, the Southern Alberta Provincial Auditorium and additional facilities at the Provincial Institute of Technology and Art.

At Red Deer construction was commenced on the new Mental Institution for Adult Mental Defectives, and is now progressing in an orderly and well scheduled programme.

The Edmonton area was the scene of the major activity of the Department and saw the commencement of construction of several major projects, such as the School for Deaf, Headquarters of the Research Council of Alberta, the Northern Alberta Provincial Auditorium and the Belmont Rehabilitation Centre.

The Mechanical Branch also had a very busy year. Expansion of facilities has taken place in almost every Institution, not only in power generated, but also in generation capacities, water softening, and conversion from DC to AC power. Interconnection for electrical energy between local utilities and power generation equipment has also been completed.

Considerable work has been done at several other Institutions and locations, the full details of same being in the attached report.

In addition to the projects enumerated on the above mentioned report, the Architectural Branch did considerable work on various buildings for the Alberta Government Telephones and also carried out planning and design for Municipal Hospitals at McLeod, Bassano, Cardston and Olds.

Respectfully submitted,

ARTHUR ARNOLD,
Deputy Minister of Public Works.

DEPARTMENT OF PUBLIC WORKS

Report for Fiscal Year Ended March 31st, 1955

The Department of Public Works is responsible for servicing and maintaining all Provincial Public buildings in the Province and for planning, designing and supervising the construction of all new buildings. In addition to a very large maintenance programme the following major projects were carried out during the year:

BELMONT:

Work on the Belmont Rehabilitation Centre progressed this year on an accelerated schedule. Erection of the Main Building and the Service Buildings commenced. Plans are being prepared for the necessary sewage and water systems. Staff houses are being constructed on a site adjacent to the institution. A work shop for the inmates, which is a necessary part of the Rehabilitation Programme, was also completed during this period.

BOWDEN:

This Institution was enlarged by the construction of a new building for juveniles. A new barn, a root house, and a piggery were added to the farm section. The increase in staff and the fact that the Institution is located a considerable distance from a large population centre necessitated the erection of two additional staff residences. Considerable land-scaping, road building and flood lighting were also included in this year's building programme.

BROOKS:

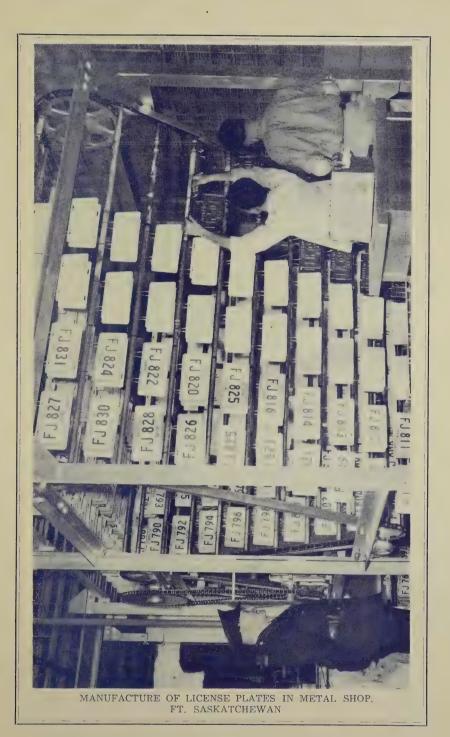
Last year the main building programme at the Demonstration Farm was completed. This year a programme of landscaping was carried out which included land levelling, the installation of culverts and the building of access roads. Work was also done on the water supply and irrigation problem.

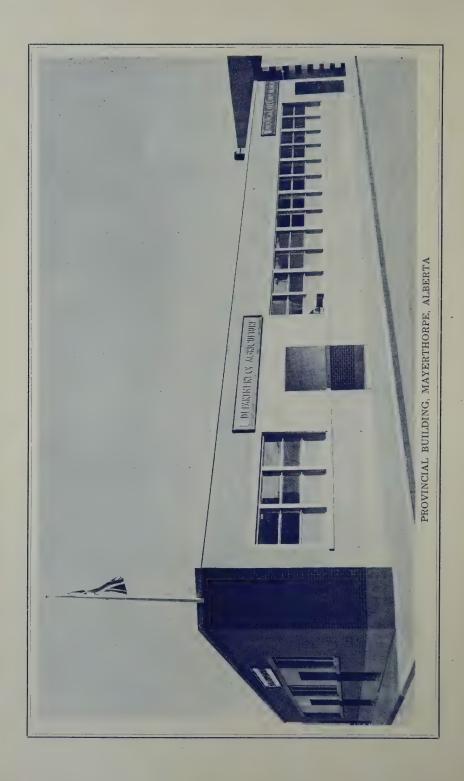
CALGARY:

Land was purchased and the construction of a new building was commenced which will be occupied by the Petroleum and Natural Gas Conservation Board. This land adjoins the Provincial Government buildings' area where the Court House and Land Titles' Buildings are located.

At the Provincial Institute of Technology and Art the erection of a new Science building was started, designed to house the Chemistry and Physics Departments and the Testing Laboratories. The completion of this building will further extend the Technical training facilities of this Institute, which already ranks amongst the foremost of its kind in Canada.

This area was selected as the site of the Southern Alberta Auditorium and considerable preparatory work was done. The final selection of the site has now enabled the architects of this Department to proceed with the major plans.





CAMROSE:

The Provincial Auxiliary Home in this City was enlarged again with the completion of the new ward and the commencement of a new laundry building. Increased population required several auxiliary buildings including offices and a large root cellar.

DRUMHELLER:

The new Court House was completed and court sessions have been held in this contemporary-styled building.

EDMONTON:

On Jasper Avenue, an old building, which formerly housed the Treasury Branch, was demolished and on the same site the erection of a new modern building was begun. It will house the main Treasury Branch and the Superintendent's Offices. The lift slab method which is a new method of floor construction was employed in the erection of this building to avoid possible foundation difficulties caused by the presence of other adjoining large structures. This new method of construction will permit work to proceed during the winter months. It is expected that the new building will be occupied and the main Treasury Branch opened for business in the summer of 1955.

Work proceeded at a rapid pace on the renovation of the Court House. The Single Men's Hostel was completed and opened in January 1955.

The major renovation of the Alberta Block which was completed this year provided excellent office accommodation for the new Treasury Branch and other Government Offices.

In the University area, work began on the erection of a new headquarters building for the Research Council of Alberta. This building includes specially designed laboratories with a Pilot Plant for specialized research.

The University of Alberta officially opened the Agricultural Building during this period and the opening of this building conformed with the theme of the 1954 convocation. The University area was selected as the Northern Alberta Auditorium Site and considerable preparatory work to the site and placement of services was done.

The New Head House complete with greenhouses was started on the Campus and it is proposed to have this building in operation for the 1955-1956 academic session.

Plans are being prepared for the erection of an entirely new type of education media for deaf children. This School for the Deaf will be located on land transferred from the University of Alberta farm area, and

when completed in 1956 will be one of the most modern structures and fully equipped.

In order to prepare for the housing of staff, six (6) staff dwellings were erected, fire services installed and a system of roadways originated.

One of the major projects undertaken this year by this Department, namely the construction of the Poliomyelitis and Pediatric Wing of the University of Alberta Hospital began to take form. The structural steel work and the erection of the exterior walls and roof were completed thus permitting work on the interior to continue throughout inclement weather. This 250 bed addition represents the latest in medical technology for the treatment of Poliomyelitis and will be one of the most modern on the North American Continent.

FAIRVIEW:

At the Agricultural School the facilities were increased with the completion of two staff residences and a bunk house. Additional landscaping, roads, sidewalks and curbing were also completed.

FORT SASKATCHEWAN:

The Metallurgical Plant for the manufacture of license plates for the Province of Alberta has been completed. Machinery is now being installed and will be operated by the inmates. It is anticipated that this plant will fabricate all the license plates used on Alberta motor vehicles in 1956. This single storey building is of modern design, well ventilated and lighted. In addition, three staff houses were constructed and numerous service items such as storage buildings, refrigeration areas, and exercise yards.

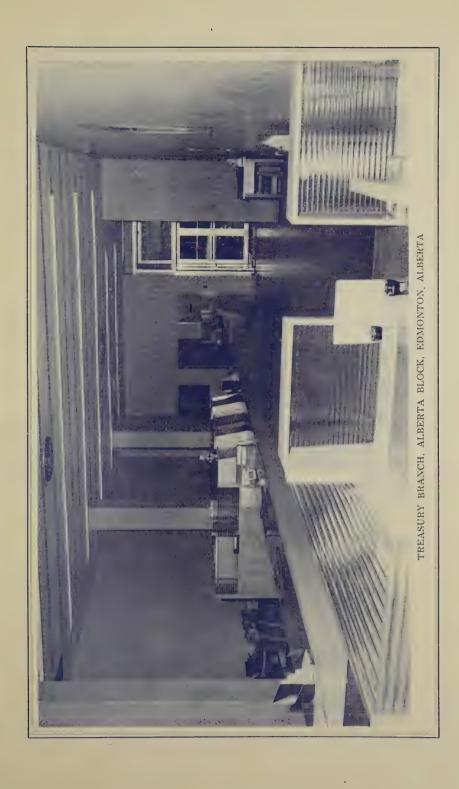
KEITH:

The Sanatorium previously known as the Central Alberta Sanatorium has been renamed to commemorate the name of the late Dr. Baker, who was for many years the Medical Superintendent of this Institution. This Sanatorium increased its service facilities when the annex to the Nurses' Home was completed. Several staff residences were completed and the electrical system of the Sanatorium was converted in order to conform with the emergency power supply which is available from the City of Calgary.

The extensive program of road building, curbing, new cement walks and landscaping is continuing.

LAC LA BICHE:

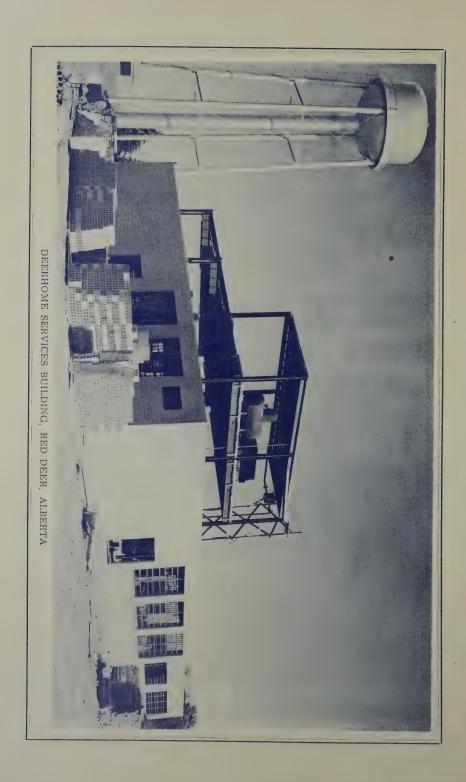
A new Provincial Building for this area has to be erected and contracts have been let. It is anticipated that the building will be occupied in the latter part of 1955.







DMONTON AND CALGARY



LETHBRIDGE:

The Provincial Gaol near this City was further enlarged with the construction of a modern cannery. This cannery will be equipped with the latest type of machinery for the processing of the extensive vegetable crop grown at the Gaol.

Two main dwellings were added to staff quarters. A new carpenter shop, a granary and an addition to the cow barn were also part of this year's building program.

MAYERTHORPE:

A one storey Provincial Building was constructed this year. The construction of this building provides modern accommodation for the Alberta Liquor Control Board Store, the Treasury Branch, the Court Room, and other offices of the Government.

OLIVER:

The major construction at this Institution was the new Admission Ward which is expected to open early in 1956. This building is one of the most modern on the Continent, and features a modern decor which is the trend of Mental Admission Hospitals. Considerable extension to the Power House has been done to care for the increased number of buildings at this Institution. Once again increased patient facilities have necessitated staff quarters being enlarged, and the staff dining room has been doubled in size. To prevent any harmful effects to the water tower, measures were taken to preserve this 40 year old structure.

The sewage system was enlarged and modernized to care for the increased capacity at this Institution.

PONOKA:

The Male Staff Dormitory was constructed to accommodate sixty-three (63) men. In addition to the necessary bedrooms, recreation and lunch rooms were provided. The building consists of three floors and is of wood and frame construction. A pleasing architectural effect is presented by the use of brick veneer, and asbestos cement panelling.

Renovation was stared in Ward Four to bring this building up to modern institutional standards. The occupational therapy program was further advanced by the installation of new modern cannery equipment. The electrical revisions are being carried out according to schedule in order to bring the entire institution up to present day electrical standards.

RAYMOND:

The Provincial Auxiliary Hospital adjacent to the Town of Raymond has been enlarged with the addition of a machine shed.

RED DEER:

Provincial Training School

The new High Grade Male Ward was completed, as well as the extension to the Laundry, Stores Building, and Dairy Barn. The increase in population necessitated a new Male Staff Building which was also completed this year.

Deerhome Institution:

Construction of an entirely new Mental Institution for Adult Mental Defectives adjacent to the Provincial Training School, was commenced during this fiscal year.

Contracts were awarded for the construction of a Services Building

which will contain the Laundry services and Heating Plant.

Contracts were also awarded for the sewage and water services for the entire project. Construction is well under way and progressing very satisfactorily.

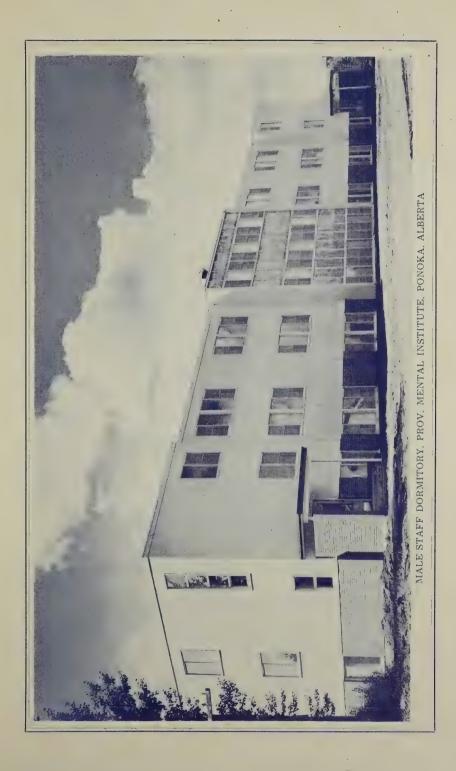
OTHER CENTRES:

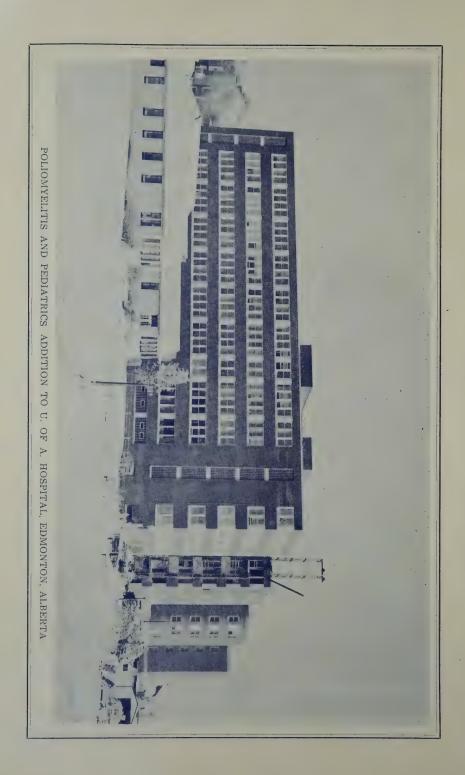
The Department of Public Works also constructed miscellaneous buildings such as Weigh Scale Houses, Highway Maintenance Shops, etc., at various points throughout the Province.

DEPARTMENT OF PUBLIC WORKS

BUILDING AND MAINTENANCE BRANCH.

Expenditure for 1954-55	
Income Expenditure.	
708 \$ 261,653.79 709 \$ 2,099,201.69 710 \$ 534,658.99	
Capital Expenditure.	
Special Warrant 2, 1954-55	
Completion of Addition Civil Defence Building, Edmonton	\$ 6,960.13
Special Warrant 13, 1954-55	
Grant Towards Construction of Addition Police Court, Calgary	\$ 65,000.00
Special Warrant 36, 1954-55	
To Town of Cardston in connection with construction of Swimming Pool	\$ 760.08
Special Warrant 39, 1954-55	
Being one-third of the cost of construction of an addition to the Police Court Building, Edmonton, (Grant to City of Edmonton)	\$ 116.019.36





MECHANICAL BRANCH

Report for Fiscal Year Ended March 31, 1955. F. E. Coe, Mechanical Superintendent

This report deals generally with the operation and maintenance of eight Government power plants and the supply and maintenance of utility services at the same larger Provincial Institutions.

The power plant statistics totals show some increase over last year, this being a reflection of still increasing size of the institutions by building additions and consequent increased demand on services and plant outputs and increased operating and maintenance expenses.

Parliament Buildings Power Plant, Edmonton.

An additional 30,000 lb./hr. steam boiler together with auxiliaries has been purchased and is being installed in this plant. This installation is necessitated by the projected heating and power load requirements of the Highways Building now under construction on the grounds and will raise the total boiler capacity of the plant to 90,000 lb./hr., which capacity is sufficient for presently projected and some additional future building construction.

Additional power switchboard panels and apparatus has also been purchased and installed to take care of the Highways building and future requirements.

Provincial Institute of Technology, Calgary.

Due to start of construction of the Provincial Auditorium, Calgary, on the Institute grounds and projected building also of an East Block, arrangements are being made to provide additional boiler and auxiliaries to supply ultimate steam requirements.

Provincial Mental Hospital, Ponoka.

The installation of two 625 KVA Skinner Vertical Unaflow enginegenerator units at this plant has been completed and an additional 30,000 lb./hr. boiler has been purchased and delivered to replace two old 250 H.P. B & W boilers and increase plant capacity.

It was found that unstable soil conditions resulted in excessive vibration problems from the two 625 KVA engine-generator units and was affecting the stability of adjoining structures, therefore, upon the request of the Department of Public Health, these units were placed on a basis of emergency operation, at the present time. Power is supplied through an outside connection of 300 KVA capacity.

Boiler make-up water softening equipment urgently required in the power house has been purchased, installed and put into operation.

Appreciable expenditures at the request of the Department of Public Health for the purchase of replacement tubs, basins and other fixtures in

Wards 3A, 4, 5 and 6 have been made and installation completed. On similar request, replacement and renovation of steam lines in Farm Dormitory No. 2 building has been made.

Provincial Gaol, Fort Saskatchewan.

Installation of equipment in the new power plant, including moving of B & M 100 KVA engine-generator unit out of old plant and re-installation, has been completed and the plant put into complete operation. This plant has two 10,000 lb./hr. gas/oil fired boilers with space allocation for a future third boiler and marks completed change of all plants from coal to gas firing. This plant also marks a change from past D.C. power generation to A.C. generation to meet requirements of the growing institution.

Suitable A.C. pumping equipment has been purchased and installed to provide summer lawn pumping service of water from the River and emergency tower service in the winter season in the event of failure of Town water supply system.

Provincial Gaol, Lethbridge.

Installation of the 5,000 lb./hr. boiler moved from the old plant at the Provincial Training School, Red Deer, has been completed and the boiler put into operation.

Replacement of service lines from the power house to four Gaol Cottages and the Boarding House has been completed.

Various building construction projects at the Gaol, notably, a carpenter shop, cow barn addition and cannery are in progress under the direction of the Buildings Branch and a program of electrical distribution renovation is under way. This necessitates power plant conversion from D.C. to A.C. power generation. As a first step in this conversion program an outside A.C. power service of 50 KVA has been obtained and our 1955-56 Capital Appropriations provide for a power house addition, A.C. generating and other equipment.

Provincial Mental Institute, Oliver.

The new engine room structure and switchboard room addition and switchboard installation, all by the Buildings Branch, have been completed. Installation of the 625 KVA Belliss and Morcom engine-generator unit has been completed by us and put into operation on the new switchboard.

Complete replacement of heating condensate return line from the Farm Dormitory to the power plant has been made.

Heavy expenditures have been necessary for the replacement of Kitchen food wagons; refrigerators, potato peeler, Dormitory radiator grills and return lines in the latter buildings.

Expenditures requested by the Department of Public Health cover replacement of sinks in the Farm Dormitory, Farm Kitchen, Dining Room and Wards 5A, 5B and 5C, all completed.

As the institutions grow and age these latter items of expenditure become appreciable.

Baker Memorial Sanatorium, Keith.

Shipment of the 210 KVA Belliss and Morcom engine-generator on order was received at the plant in the latter part of March, 1955. All foundation and other preparations are completed for this unit and installation will be started without delay.

Shipment of the 350 H.P. boiler and equipment ordered has also been received at the plant.

Additional water softening equipment has been purchased and installed to meet the increased requirements of softened water for laundry service.

Heavy expenditures have been necessary for the replacement of heating return lines in the Nurses' Home and Infirmary No. 6. All pipe and fittings are being replaced with copper materials and the work is being done by our maintenance staff.

Provincial Training School, Red Deer.

Installation of the 10,500 lb./hr. Foster Wheeler boiler has been completed. The boiler was actually in partial operation during the winter months of 1953/54 and completion of installation delayed till, the summer months of 1,954/55.

An additional Belliss and Morcom engine-generator unit of $312^{1}/_{2}$ KVA capacity has been purchased and delivered to the plant. Construction of power house engine room addition and foundation for the engine is progressing under the direction of the Buildings Branch. It is hoped to have this engine installed and operating by early fall of 1955.

F. E. COE, Mechanical Superintendent.

September 2nd, 1955.

STATISTICS ON CAPITAL EXPENDITURES, PROVINCIAL GOVERNMENT POWER PLANTS FOR THE YEAR ENDING MARCH 31, 1955

(F. E. Coe, Mechanical Superintendent)

TOTAL	63,476.34	66,780.01	18,289.85	13,796.73	26,756,50	60,339.09	20,540.49	\$269,979.01
Extension to Boiler Room and Plants New Incinerator				1		4,825.41	4,284.78	1 67
Boiler Make-up and Water Softening Equipment		10,141.50				1,439.50		
Replacement of Old Service Lines and Laundry and Kitchen Equipment		1,957.28	min.na	2,065.91	16,800.34	4,745.85		
New Switch- Boards, Equipment, Cable, etc.	6,851.75	3,649.60						
Installation of New Boilers and Equipment	48,192.23	41,513.57	9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11,730.82		22,071.60		
New s. Generating Units. & Equipment		5.937.87	1,473.64		9,956.16	25,514.70	14,352.15	
Furnace Alterations, tristallation of Gas. Gas Burners. Accessories. Oil Storage. Tanks. Pumps. Plping, Pipe Covering. Etc.	Parliament Buildings and Administration Buildings, Edmonton 8,432.36	Provincial Metnal Hospital, Ponoka 3,580.19	Provincial Gaol, Fort Saskatchewan 16,816.21	Provincial Gaol, Lethbridge	Provincial Mental Institute, Oliver	Baker Memorial Sanatorium, Keith 1,742.03	Provincial Training School, Red Deer 1,903.56	
	Par and Bui	Pro	Pro	Pro	Pro Ins	Bal	Pro	

PROVINCIAL GOVERNMENT POWER PLANT STATISTICS FOR THE YEAR ENDING MARCH 31, 1955 (F. E. Coe, Mechanical Superintendent)

¥	Expenditure for Maintenance and Operation	\$102,133.94	38,272.89	162,656.61	50,472.45	45,298.08	139,129.97	69,141.86	65,160.54 \$672,266.34	
ELECTRICITY	K.W. Hours Purchased	2,582,400	555,200	325,600	103,260	3,900	-	56,700	90,470	
	K.W. Hours Generated	2,729,600	58,200	1,939,900	190,800	135,824	2,090,100	506,930	596,610 8,247,964	: Feet rial Gallons /att Hours
WATER	Purchased	29,171,812	6,040,320		13,088,200	7,678,125	57,975,216		23,630,000 137,583,673	1.132 Tons 876,071,000 Cubic Feet 248,440,873 Imperial Gallons 11,965,494 Kilowatt Hours
WA	Pumped from Local Sources (Imperial Gallon)	1		69,541,000	730,000	9,235,500		31,350,700	110,857,200	Fotal Coal Used Dotal Gas Used Fotal Water Used Fotal Electricity Used
FUEL	Gas (Cu. Ft.)	196,661,000	35,638,000	194,729,000	40,351,000	45,000,000	214,689,000	70,064,000	78,939,000 876,071,000	sed ed Used sity Used
	Coal (tons)	ı		43	626		13		97 1,132	
	Location	Parliament Buildings and Administration Buildings, Edmonton	Institute of Technology, Calgary	Provincial Mental Hospital, Ponoka	Provincial Gaol, Fort Saskatchewan	Provincial Gaol, Lethbridge	Provincial Mental Institute, Oliver	Baker Memorial Sanatorium, Keith	Provincial Training School, Red Deer	Total Total Total Total



